



Data and Privacy File Guides

iCloud: Books

September 2020

File name Books.json

File description This file contains information related to the user's Apple Books activity.

Why Apple keeps this information Apple retains this information in order to allow the user to manage their reading goals and to sync Books information across the user's devices.

Field Name	Details
assetDetail	
assetID	Identifier for a single book in the user's library
bookmarkTime	For audiobooks, the time within the book that the user most recently played
isFinished	Whether the user has read far enough into a book for it to be marked as finished
notFinished	Whether the user has marked the book as not finished
readingPositionCFI	The reading position for certain types of books, including multitouch books
readingPositionPhysicalPageNumber	The user-readable page number for the reading position in a book (may be Roman numerals for multitouch books)
readingPositionAnnotationVersion	The version of a user's annotation
readingPositionAssetVersion	For multitouch books, the version of the book used to establish reading position
readingPositionAbsolutePhysicalLocation	For multitouch books, the actual page number for the reading position
readingPositionExtraData	Additional information about the user's reading position within a book (e.g., exact position in the text for EPUB books on iOS; the user's recent in-book history for multitouch books)
epubLocation	Information describing a position within a section of text in a book
ordinal	The location of a section of text within a book
startPath	References that indicate where the beginning of a location is within a section of text
index	the index of the element

Field Name	Details
tagName	the name of the XHTML element
className	A value used to identify sections of text within a book
id	A value used to identify sections of text within a book
startOffset	Identifier used to indicate the start of a location within a section of text
endPath	Identifiers used to indicate the end of a location within a section of text
endOffset	Identifier used to indicate the end of a location within a section of text
epubCFILocation	Information describing a position within a section of text in a book
ordinal	The location of a section of text within a book
cfi	A value used to describe the location of a section of text within a book
anchorLocation	Information describing a position within a section of text in a book.
ordinal	The location of a section of text within a book
anchor	Identifier used to indicate a location within a section of text
audioLocation	The user's position within an audiobook
ordinal	The track number for a user's position within an audiobook
offset	The time of the user's position within the track
pageLocation	The user's page-based position in an EPUB book
pageOffset	The exact page number of the user's position in an EPUB book, starting at 0
ordinal	The location of a page of text within a book
stack	Locations within a multitouch book that can be used to go back or forward within the user's navigation history
pageIndex	The location of a page of text within a book
range	The location of text within a book
storageUID	Identifier used to indicate the location of a page
nodeGUID	Identifier used to indicate the location of a page
cursor	The position within the stack that refers to the user's current location in a multitouch book
preContext	For finding and displaying annotations / highlights

Field Name	Details
postContext	For finding and displaying annotations / highlights
contentNodeRelativePageIndex	Identifier used to indicate the start of a section of text
readingPositionLocationRangeStart	The chapter number within an EPUB book at which the user started their last viewing session
readingPositionLocationRangeEnd	The chapter number within an EPUB book at which the user ended their last viewing session
readingPositionStorageUUID	Identifier used to indicate the location of a reading position
readingPositionLocationUpdateDate	The date and time on which the location fields of the user's reading position last was modified
readingPositionPlaybackTimeUpdated	The date and time on which the playback fields of the user's audiobook playback position last was modified
readingProgress	Identifier used to indicate percentage of text read
readingProgressHighWaterMark	Identifier used to indicate percentage of text read
taste	Whether the user marked a book as 'Love' (1), 'Hate' (2), did not mark it (0)
tasteSyncedToStore	Whether the user's tastes have been synced to the Books store (1=yes, 2=no, 3=unknown)
lastOpenDate	The date on which the user last opened the book
dateFinished	The date on which the user finished the book
assetAnnotations	Information describing user annotations and highlights.
creationDate	The date and time on which the annotation first was created
creatorIdentifier	An identifier for the application with which the annotation was created
deleted	Whether the user has deleted the annotation
isUnderline	Whether the annotation appears as underlining
locationCFIString	Identifier used to indicate the location of an annotation within a book
modificationDate	The date and time on which the annotation last was modified
note	The full text of the user's note
representativeText	The highlighted text from a user selected highlight.
selectedText	The user's highlighted text (will be blank for multitouch books)

Field Name	Details
style	Whether the user has highlighted the text in green (1), blue (2), yellow (3), pink (4), purple (5), has underlined the text (6) or has used none of these (0)
type	Whether the annotation is unknown (0), a point between characters (1), a range of text (2), or a reading position (3)
uuid	A unique identifier for the annotation
physicalPageNumber	The user-visible page number in a multitouch book on which the annotation appears
assetVersion	Identifier used to indicate the version of the user created annotation
chapterTitle	The title of the book in which the annotation was made
userModificationDate	The time when a highlight or note was changed last
selectedTextRange	Identifier used to indicate the location of annotated text
spineIndexUpdated	Whether the encoding bug already has been fixed for the book in which this annotation appears
absolutePhysicalLocation	The actual page number in a multitouch book on which the annotation appears
locationRangeStart	The first character in a multitouch book included in the annotation
locationRangeEnd	The last character in a multitouch book included in the annotation
locationStorageUUID	An identifier for the unit of text in a multitouch book in which the annotation appears
extraData	Information describing how an annotation should be displayed
locationModificationDate	The date and time on which the position fields related to the annotation last were modified
assetReadingStatistics	Information describing user reading statistics.
assetID	An identifier for the book being tracked through Schoolwork
appVersion	The version of Apple Books for the book being tracked through Schoolwork
assetVersion	The version of the multitouch book through which the usage statistics were established for the book being tracked through Schoolwork
readCFIs	Locations of text read by the user in a book chapter for the book being tracked through Schoolwork
tocEntries	The reading progress for each chapter within the book for the book being tracked through Schoolwork

Field Name	Details
href	Identifier used to determine the location of a section of text within a book for the book being tracked through Schoolwork
readProportion	Identifier used to indicate percentage of text read for the book being tracked through Schoolwork
timestamp	The date and time on which the user last read the chapter for the book being tracked through Schoolwork
assetReview	Information describing user reviews.
assetID	Identifier for the book the user reviewed
title	The user's title for the review
body	The text of the user's review
starRating	The user's rating for the book, from one to five stars
collectionDetail	Information describing user collections.
collectionID	Identifier for a collection in the user's library
hidden	Whether the collection should be hidden
name	The name of the collection
sortOrder	The position in which the collection appears in the user's list of collections
sortMode	The shorthand name of a sort technique applied to a collection
collectionMember	Information describing user collections.
assetID	Identifier for a single book in the user's library
collectionID	Identifier for a collection in the user's library
sortOrder	The order in which books in a manually-sorted collection should be displayed
readingNowDetail	Information describing user Reading Now.
assetID	Identifier for a book in the user's Reading Now feed
isTrackedAsRecent	Whether the book should be classified as recent
lastEngagedDate	The date and time in which the user last opened the book
globalMetadata	Information describing user Book account actions.
key	A string used to track the value, as defined below

Field Name	Details
value	A piece of data representing an action the user took across their entire Books account (e.g., importing their data from an iTunes account into their iCloud account)
readingHistoryModel	Information describing user reading history.
readingTime	The amount of time, in seconds, the user has spent reading on this given day
day	The date on which this reading history model was created
readingGoal	The amount of time, in seconds, the user has set as their daily reading goal